IN THE ABSTRACT:

Please add the abstract as follows:

A sound synthesizer is provided that reduces the computational requirements of a synthesizer with a high degree of polyphony, while ensuring that audible artifacts are kept to a minimum. The synthesizer comprises a plurality of samples stored in a memory; a plurality of voices each comprising means for calculating an output using a plurality of samples selected from the plurality of samples stored in the memory; wherein a voice is active when calculating an output; wherein the number of samples selected by the means for calculating depends upon the number of active voices.